NEWS ITEMS ON CAG/ AUDIT REPORTS

1. CAG Report Reveals Telangana Incurred Net Excess Expenditure of Rs 75,053 Cr In 2021-22 (businessworld.in) 07 August 2023

The CAG also noted that capital spending in the state did not rise in line with the expansion of the GSDP. The CAG asserts that the fiscal administration, planning, survey, and statistics categories accounted for the majority of the excess spending

The Comptroller and Auditor General (CAG) report on the Telangana government's finances during 2021-22 was tabled in the state assembly on 6 August and said that the government incurred a net excess expenditure of Rs 75,053 crore. This was 29 per cent more than the estimates, in 11 grants or appropriations, against the approved budget of Rs 2,55,017 crore.

The CAG also noted that capital spending in the state did not rise in line with the expansion of the GSDP. The CAG asserts that the fiscal administration, planning, survey, and statistics categories accounted for the majority of the excess spending. The government did not spend less than what was planned for the department of industries and house construction.

In comparison to the budget allocation of Rs 9,273 crore, expenditure under fiscal administration, planning, survey, and statistics was Rs 76,117 crore (including Rs 67,274 crore on account of repayment of Ways and Means Advances), exceeding the budget by Rs 66,844 crore (720 per cent).

As per the report, the excess expenditure occurred mainly under grants to Major and Medium Irrigation, Medical and Health, and Panchayat Raj Departments. Of these, the expenditure under Medical and Health was Rs 509 crore against a budget allocation of Rs 382 crore, exceeding the budget by Rs 128 crore or 33 per cent.

According to the CAG, Telangana has a fiscal deficit of Rs 46,639 crore as of March 31, 2022, and a revenue deficit of Rs 9,335 crore as of that date. Net of borrowings and other liabilities, the public debt (Rs 42,936 crore), public account (Rs 3,773 crore), and cash balance (a negative Rs 70 crore) were used to cover the fiscal deficit. The state government spent about half of its revenue (Rs 1,27,468 crore) on committed expenses including salaries (Rs 30,375 crore), interest payments (Rs 19,161 crore), and pensions (Rs 14,025 crore).

In order to maintain the mutually agreed-up minimum cash balance that the state government was supposed to preserve, Special Drawing Facility or Ways and Means Advances are requested from the Reserve Bank of India (RBI). The state government used special drawing facilities worth Rs 9,636 crore for 289 days and ways and means advances worth Rs 34,969 crore for 259 days in 2021–2022 for its operations.

During the 2021-22 financial year, an overdraft of Rs 22,669 crore was availed for 100 days. The state government had a revenue surplus up to 2018-19, which has come down to a revenue deficit of Rs 9,335 crore (Rs 22,298 crore deficit in 2020-21) and a fiscal deficit of Rs 46,639 crore (Rs 49,038 crore in 2020-21). These are 0.81 percent and

4.06 percent of the GSDP, respectively. The fiscal deficit constituted 27 percent of total receipts (Rs 1,74,155 crore).

The state's anticipated revenue was Rs 2,21,687 crore but its estimated income was Rs 1,74,154 crore, according to CAG. Estimated income shortfall was Rs 6,744 crore; actual shortfall was Rs 9,335 crore. Tax revenue were Rs. 1,09,992 crore, whereas grants from the Centre totaled Rs. 8,619 crore. https://www.businessworld.in/article/CAG-Report-Reveals-Telangana-Incurred-Net-Excess-Expenditure-Of-Rs-75-053-Cr-In-2021-22/07-08-2023-486899/

2. Pre-Poll Sops, CAG Concerns: How Robust Are Telangana's Finances? (bqprime.com) 07 August 2023

Telangana Chief Minister K Chandrasekhar Rao appears to be in a more than generous mood. From announcing a timeline for a complete crop loan waiver promised in 2018, to merger of the state-run TSRTC with the government, regularisation of contract employees who lost jobs, big hike promises to employees and schemes for the socially vulnerable sections, there is something big for every electorally significant segment this pre-election season. After an almost four-year moratorium, the Bharat Rashtra Samithi government in Telangana has restarted its loan waiver for farmers. Elections in Telangana are due before the year-end, and farm loan waiver was a promise made before the 2018 assembly elections.

After an almost four-year moratorium, the Bharat Rashtra Samithi government in Telangana has restarted its loan waiver for farmers. Elections in Telangana are due before the year-end, and farm loan waiver was a promise made before the 2018 assembly elections.

Starting Aug. 3, the state government has said Rs 19,000 crore will be disbursed and the process will be completed by mid-September in a phased manner.

Opposition parties have criticised the move, calling KCR an "opportunist" for allegedly remembering farmers only on the eve of elections. They had been targeting the state government for non-implementation of the loan waiver even during the recent floods and rains that hit standing crops.

Chief Minister KCR blamed the delay on the central government. He said there was economic slowdown due to the central government's demonetisation move, which incidentally the then TRS (now BRS) government had supported. He also said the central government had been vindictive in not allowing the state to raise loans citing the Fiscal Responsibility and Budget Management rules. The central government had been vindictive in not allowing the state to raise loans citing the Fiscal Responsibility and Budget Management rules. The central government had been indifferent towards Telangana in the release of funds and that is why there was a delay in implementation of the farm loan waiver scheme. KCR said.

Already 5.6 lakh people with loans of up to Rs 35,000 have benefited, said state Agriculture Minister Niranjan Reddy. Earlier, under the crop loan waiver scheme of 2014, Rs 16,144 crore were waived for 35,31,913 eligible farmers in the state, he said.

The state is already implementing Rythu Bandhu (direct investment benefit transfer) and Rythu Bima (farmer insurance scheme), other than free electricity and irrigation. The chief minister has also announced a programme of starting food processing units. "The idea is to empower farmers and financially uplift them," KCR said.

All this, of course, comes at a cost. Telangana had a revenue surplus up to FY19. However, it faced a revenue deficit of Rs 9,335 crore in FY22, according to a report by the Comptroller and Auditor General. The fiscal deficit, at Rs 46,639 crore, constituted nearly 27% of the total receipts of Rs 1,74,155 crore.

Telangana's total liabilities, including public debt, stood at Rs 3,21,611 crore, according to the report which was tabled on Sunday. The public accounts watchdog expressed concern over the state's fiscal health, highlighting that the government had utilised borrowings for repayment of public debt.

Other Concerns

-Public debt, at 27.4% of GSDP, was above the prescribed limit of 25% of GSDP.

-Fiscal deficit (of Rs 46,639 crore) was at 4.06% of GSDP for FY22, when it is not supposed to exceed 3% during a financial year.

The CAG report blamed this on huge loans from financial institutions to execute many projects and for welfare schemes, and dip in revenue due to the pandemic. Capital expenditure during FY22 at Rs 28,874 crore (2.51% of GSDP) had not kept pace with the growth of GSDP, the CAG said.

Around 50% of the revenue receipts, or Rs 1,27,469 crore, was spent on committed expenditure like salaries (Rs 30,375 crore), on payment of interest (Rs 19,161 crore) and pensions (Rs 14,025 crore).

These figures did not deter the chief minister from announcing that the employees would get an "unbelievable" hike under the next pay revision committee. KCR said in the last nine years of BRS rule and Telangana formation, the salaries of government employees had risen by 70% and they were the highest paid in the country, even more than central government employees.

Just before the three-day assembly session began on Aug. 3, the chief minister announced that the state-run road transport corporation, with over 43,000 employees, would be merged with the government. This was a long-pending demand of the unions that went on a 52-day strike in 2019, which crippled public transport services in the state. But the CM had then categorically ruled it out, and said dozens of other corporations would make similar demands and it was impossible to fulfill.

Now, the CM has won over the 43,000 employees and their families, with his unexpected announcement, that will cost the government an additional Rs 3,000 crore.

What is worrying is that, according to data shared by the Union Finance Minister in Parliament, Telangana's debt has gone up from Rs 1.9 lakh crore in 2019 to 3.66 lakh crore in 2023. https://www.bqprime.com/economy-finance/pre-poll-sops-cag-concerns-how-robust-are-telanganas-finances

3. Telangana's debt at Rs3.22 lakh cr in FY22 (bizzbuzz.news) 07 August 2023

Telangana's total liabilities including public debt stood at Rs3,21,611 crore by the end of the last financial year even as the guarantees provided by the State government was Rs1,35,283 crore, according to a CAG report placed in the Assembly on Sunday.

Hyderabad: Telangana's total liabilities including public debt stood at Rs3,21,611 crore by the end of the last financial year even as the guarantees provided by the State government was Rs1,35,283 crore, according to a CAG report placed in the Assembly on Sunday.

The CAG report further said the public debt and other liabilities showed an increase of Rs43,593 crore (16%) in 2021-22 over the previous year. The public accounts watchdog pegged the said capital expenditure during 2021-22 at Rs28,874 crore (2.51 per cent of GSDP), but stated that the growth in capex has not kept pace with the steady growth of GSDP."

https://www.bizzbuzz.news/markets/telanganas-debt-at-rs322-lakh-cr-in-fy22-1238403

4. KCR's Big Spend on Poll Promises Burns Hole in Telangana's Fiscal Health (ndtv.com) 07 August 2023

Telangana had a revenue surplus upto 2018-19 and by 2021-22, it is facing a revenue deficit of ₹ 9,335 crore, a report by the Comptroller and Auditor General (CAG) has said.

Hyderabad: Telangana Chief Minister K Chandrasekhar Rao, it would appear, is in a more than generous mood.

From announcing a timeline for a complete crop loan waiver, promised in 2018, to merger of the state-run, Telangana State Road Transport Corporation (TSRTC), with the government, regularisation of contract employees who lost jobs, big hike promises to employees, schemes for the socially vulnerable sections, there is something big for every electorally significant segment this pre-election season.

After an almost four-year moratorium, the BRS government in Telangana has restarted its loan waiver for farmers. Elections in Telangana are due before the year-end, and farm loan waiver was a promise made before the 2018 assembly elections.

Starting August 3, the KCR government has said ₹ 19,000 crore would be disbursed and the process would be completed by mid-September in a phased manner.

Opposition parties have criticised the move, calling KCR an "opportunist" for remembering farmers allegedly only on the eve of elections. They had been targetting the government for non-implementation of loan waiver, even during the recent floods and rain that hit standing crop.

Chief Minister KCR blamed the delay on the Centre. He said there was economic slowdown due to the Centre's demonetisation move, which incidentally the then TRS (now BRS) had supported. He also said the Centre had been vindictive in not allowing

state to raise loans citing Fiscal Responsibility and Budget Management Act (FRBM) rules.

The Centre had been indifferent towards Telangana in the release of funds, he added. That is why there was a delay in implementation of farm loan waiver scheme, he said.

Agriculture minister Niranjan Reddy has said already 5.6 lakh people with loans upto 35,000 have benefitted. Earlier, he said, under the crop loan waiver scheme of 2014, ₹ 16,144.10 crore was waived off for 35,31,913 eligible farmers in the state.

The state is already implementing Rythu Bandhu (direct investment benefit transfer) and Rythu Bima (farmer insurance scheme), other than free electricity and irrigation. The Chief Minister has also announced a big program of starting food processing units. "The idea is to empower farmers and financially uplift them," KCR said.

All this, of course, comes at a big cost.

Telangana had a revenue surplus upto 2018-19 and by 2021-22, it is facing a revenue deficit of ₹ 9,335 crore, a report by the Comptroller and Auditor General (CAG) has said.

The fiscal deficit at ₹ 46,639 crore constituted nearly 27 per cent of the total receipts of ₹ 1,74,155 crore.

The CAG report was placed in the assembly on Sunday said Telangana's total liabilities including public debt stood at ₹ 3,21,611 crore. The public accounts watchdog expressed concern over the state's fiscal health pointing out that the government had utilised borrowings for repayment of public debt.

Other big concerns: That public debt at 27.4 per cent of GSDP was above the prescribed limit of 25 per cent of GSDP. Fiscal deficit (of ₹ 46,639 crores) was at 4.06 per cent of GSDP for 2021-22, whereas it shall not exceed 3 per cent during a financial year.

The CAG report blamed huge loans from financial institutions to execute many projects and for welfare schemes, and dip in revenue due to pandemic, for the increased state debt burden and fiscal deficit.

The CAG said capital expenditure during 2021-22 at ₹ 28,874 crore (2.51 per cent of GSDP) had not kept pace with the steady growth of GSDP.

Around 50 per cent of the revenue receipts, ₹ 1,27,469 crore was spent on committed expenditure like salaries (Rs 30,375 crore), on payment of interest (Rs 19,161 crore) and pensions (Rs 14,025 crore).

These figures did not deter the Chief Minister from announcing the same day as the tabling of the CAG report, that the employees would get an "unbelievable" hike under the next Pay Revision committee.

KCR said in the last nine years of BRS rule, and Telangana formation, the salaries of government employees had risen by 70 per cent and they were the highest paid in the country, even more than Central government employees.

Just before the three-day assembly session began on August 3, the Chief Minister announced that the state-run road transport corporation with over 43,000 employees, would be merged with the government. This was a long-pending demand of the Unions that went on a 52-day strike in 2019 that crippled public transport services but the Chief Minister had then categorically ruled it out, saying dozens of other corporations would make similar demands and it was impossible to fulfil.

Now, the Chief Minister has won over the 43,000 employees and their families, with his unexpected announcement that will cost the government an additional ₹ 3,000 crore.

What is worrying is that, according to data shared by the Union finance minister in parliament, Telangana's debt has gone up from ₹ 1.9 lakh crore in 2019 to 3.66 lakh crore in 2023. Seems unlikely that political compulsions will allow the once-revenue surplus state government to reverse this trend. https://www.ndtv.com/india-news/kcrs-big-spend-on-poll-promises-burns-hole-in-telanganas-fiscal-health-4276982

5. Why CAG red-flagged student scholarships that Maharashtra spent over Rs 7,000 crore on (indiatoday.in) 07 August 2023

An audit of the scholarships for the weaker sections through direct benefit transfer revealed glaring procedural lapses and even ineligible wards of serving or former government employees drawing benefits

A report of the Comptroller and Auditor General of India (CAG) has pointed to lapses in the implementation of the direct benefit transfer (DBT) scheme in student scholarships for the weaker sections of society in Maharashtra. The performance audit has pointed to various lacunae, such as beneficiary mobile numbers being linked to more than one applicant and some institutes and colleges mentioning erroneous intake capacities, which resulted in more applications being approved. The CAG report has also revealed how ineligible wards of serving or former state and central government employees may be benefitting from the scheme.

The DBT scheme is pitched as a major reform of the Union government to ensure timely delivery of welfare to the people. The 'Maharashtra DBT' system was launched in 2018 as an electronic platform for direct transfer of benefits and subsidies to the beneficiaries. Online disbursement of scholarships to students was one of the key schemes.

The CAG report on 'Implementation of Direct Benefit Transfer in Scholarship Schemes of Other Backward Bahujan Welfare Department, Government of Maharashtra' was tabled in the Maharashtra legislative assembly on August 4. Rs 7,227.58 crore was disbursed as scholarships by 10 state departments from 2018-19 to 2019-20 through the online DBT system.

Maharashtra's Other Backward Bahujan Welfare Department (OBBWD), with the highest expenditure of Rs 2,751.47 crore (38.07 per cent) on scholarships disbursed through DBT, was selected by the CAG for review. Two schemes, the centrally-

sponsored post-matriculation scholarship for Other Backward Classes (OBC) students and the state-funded post- matriculation scholarships for Vimukt Jati and Nomadic Tribes (VJNT) students, were taken up for detailed scrutiny.

The disbursal of scholarships is through the Maharashtra State DBT and Services (MahaDBT) portal, developed by the Maharashtra Information Technology Corporation Limited (MahaIT), a state government unit.

A valid mobile phone number is a prerequisite for the verification and authentication process since it is done by sending an OTP. The notification regarding disbursement is also sent on the registered mobile number. Therefore, the mobile number being fed should be correct and must belong to the applicant.

The CAG audit revealed instances of the same mobile number being linked to multiple applications. "That mobile numbers were linked to more than one application indicated the absence of validation checks to ensure acceptance of only unique mobile numbers by the MahaDBT system. Without a unique phone number, the applicant would not be aware of the status of the disbursement of the scholarship or any changes required to the application and thus would be dependent on intermediaries, thereby undermining the objective of DBT system to eliminate intermediaries," the CAG report noted.

At the time of their registration on the MahaDBT portal, institutes and colleges are required to enter their course-wise intake capacity. The audit noticed that the system did not have any validation check to ensure the correctness of data entered. Absence of a validation check resulted in the system depicting more approved applications than the intake capacity of these institutions or colleges. "Verification carried out by audit revealed that the intake capacity was wrongly entered in the MahaDBT system by the colleges/ institutes, which was also not checked by the departments. The system neither had a validation check to ensure the correctness of data entered nor did it generate any management information system or exception report to flag such error for rectification," the report stated.

"Scholarships approved for disbursements were plagued with significant issues, such as non-disbursement and time lag in disbursement of scholarship from bill generation to final credit to the applicant/college. The audit observed that the scholarship amounts were often disbursed in the years subsequent to the academic year to which the application pertained. The deficiencies warrant that the government take appropriate action for reducing the time period in disbursement of scholarships using the DBT system," the CAG report stated.

As per state and central government orders, students were eligible for scholarships subject to the condition that parental income did not exceed Rs 1 lakh per annum. As proof, students were required to submit income certificates of parents issued by the state revenue department.

To ascertain whether this condition was being fulfilled and the income certificates genuinely reflected the income status of the applicants, the audit ascertained whether the applicants' parents were state government employees or state government pensioners. "Satisfaction of any of these conditions would largely indicate that the annual income would be above Rs 1 lakh. For this purpose, the mobile numbers of the

parents were compared with the General Provident Fund employees' and pensioners' mobile numbers. The analysis revealed cases where the applicants' parents were either serving state government employees or pensioners/family pensioners," the report noted.

A system of cross-verification of data was found to be absent in the MahaDBT system since it was not integrated with other state government systems. Biometric attendance system was also not integrated with the MahaDBT system. The state government should ensure data integration amongst various government agencies, including biometric attendance of students, for improving the reliability of data in MahaDBT, the report added.

The security audit plays a vital role in ensuring that web-based applications are free from vulnerabilities that may lead to these being hacked or compromised. The CAG audit revealed that security certification of the MahaDBT portal was not carried out, though a period of more than one year had elapsed from the last certification in August 2020. The state government should ensure that a security audit of the application is carried out at specified intervals without fail, the report emphasised.

Though the entire DBT system was online, submission of bills to the treasury for approval and disbursement of funds to the scheme-specific bank account continued in offline mode, exposing the system to risks associated with the manual process. The government may, hence, review the existing manual processes in the DBT system for re-engineering and integration with the MahaDBT system, the CAG report added. https://www.indiatoday.in/india-today-insight/story/why-cag-red-flagged-student-scholarships-that-maharashtra-spent-over-rs-7000-crore-on-2417602-2023-08-07

SELECTED NEWS ITEMS/ARTICLES FOR READING

6. Losses incurred by govt from smuggling surged by an alarming 163% over the past decade (moneylife.in) 07 August 2023

The losses incurred by the central government from smuggling surged by an alarming 163 per cent over the past decade from 2010 to 2020, as per a report.

According to the 2022 FICCI CASCADE study titled 'Illicit Markets: A Threat to Our National Interests,' the Government of India has faced an overwhelming tax loss due to smuggling which witnessed a staggering 163 per cent rise, from 2010 to 2020. The financial impact reached a colossal Rs 58,521 crore (up from Rs 22,230 crore) across five critical industries which included alcoholic beverages, mobile phones, FMCG-household and personal goods, FMCG-packaged foods and tobacco products.

Meanwhile, FICCI Committee Against Smuggling and Counterfeiting Destroying the Economy (CASCADE) on Saturday intensified its campaign against Illicit trade by launching the #BeACASCADER campaign.

As part of the campaign, an auto rally was organised to engage with people and create awareness on the detrimental consequences of illicit trade. The initiative witnessed over 250 auto rickshaws forming a convoy as they traversed a designated route which commenced from FICCI House at Tansen Marg.

Flagging off the auto rally, Neeraj Singh, Chair, FICCI Young Leaders Forum, UP Chapter, Politician and Social Worker said, "Smuggling and counterfeiting not only hinder economic progress, but also jeopardise the future of our youth, cause job losses and pose health risks. To achieve our goal of becoming a 5 Trillion dollar economy, and eventually the world's largest economy, we must stand united and raise awareness against this critical issue. I express my gratitude to FICCI CASCADE for launching this campaign and extend my heartfelt thanks to all my auto driver brothers who have come forward to support this cause."

Anil Rajput, Chairman, FICCI CASCADE said, "Illicit trade inflicts significant harm on individual industries and has a substantial negative impact on employment generation and economic growth. Illicit trade also poses a dual challenge for the government. Not only does it result in a loss of legitimate tax revenue, but it also demands additional allocation of resources for enforcement and public health measures."

"There is now a pressing need to intensify the campaign against smuggling and counterfeiting and highlight their detrimental consequences. The auto rally provides an opportunity to actively involve the Indian citizenry and make them aware of the multifaceted issues and challenges associated with illicit trade," Rajput added.

The auto rally was meticulously organised and proceeded through Tansen Marg, Mandi House, Barakhamba Road, Outer Circle Connaught Place, Janpath, Tolstoy Marg and Barakhamba Road before culminating at FICCI House. The convoy of auto rickshaws carried vibrant banners, vividly highlighting the urgent issues associated with illicit trade. Emphasising its severe repercussions, the banners carried messages about how illicit trade contributes to job losses, finances terror activities, fuels crime syndicates and is a health hazard.

Moreover, during the decade from 2010 to 2020, the tax losses incurred by the government from the alcohol industry witnessed an astronomical surge of over 508 per cent, while the increase in tax loss from the FMCG packaged foods industry stood at a substantial 201 per cent and from the tobacco industry the loss was pegged at 113 per cent.

The exponential sales loss suffered by the five industries witnessed a massive 340 per cent surge from Rs 59,046 crore in 2010 to Rs 2,60,094 crore in 2020, underscoring the severity of the illicit trade problem. FMCG packaged foods, in particular, experienced an alarming rise of nearly 600 per cent, resulting in an enormous actual loss of Rs 1,42,284 crore.

Similarly, the FMCG personal goods industry faced a colossal loss of Rs 55,530 crore in 2020, witnessing a significant increase of 270 percent from the Rs 15,035 crore loss in 2010. These exorbitant losses both for the government and the affected industries underscore the urgent need to combat illicit trade and safeguard India's economic interests. https://www.moneylife.in/article/losses-incurred-by-govt-from-smuggling-surged-by-an-alarming-163-percentage-over-the-past-decade/71608.html

7. Over 3 Lakh Hectares of Forest Land Diverted under Forest Conservation Act in 15 Years: Govt (newsclick.in) 08 Aug 2023

As per data, the top three purposes for diversion are mining (58,282 hectares), road construction (45,326 hectares) and irrigation (36,620 hectares).

Over three lakh hectares of forest land has been diverted for non-forestry use in India over the last 15 years under the Forest (Conservation) Act, 1980, Union Environment Minister Bhupender Yadav told Lok Sabha on Monday.

Compensatory afforestation was conducted over 9,34,380 hectares of land in the country during this period.

Government data presented in the House showed 61,318 hectares of forest land in Punjab, the maximum among all states and Union territories, has been diverted for nonforestry purposes since 2008-09. At present, Punjab has a total forest area of around 1,84,700 hectares.

Madhya Pradesh saw 40,627 hectares of forest land being diverted for non-forestry purposes, followed by Odisha at 28,320 hectares, Telangana at 19,419 hectares and Gujarat at 16,070 hectares.

Jharkhand (15,691 hectares), Chhattisgarh (15,082 hectares), Uttarakhand (14,141 hectares), Maharashtra (13,297 hectares), Rajasthan (12,877 hectares), Arunachal Pradesh (12,778 hectares) and Andhra Pradesh (11,093 hectares) also witnessed significant forest area diversion.

The data showed that the major purposes for diversion include mining (58,282 hectares), road construction (45,326 hectares), irrigation (36,620 hectares), transmission lines (26,124 hectares), defence (24,337 hectares), hydel projects (13,136 hectares), railways (9,307 hectares), thermal power (4,101 hectares) and wind power infrastructure (2,181 hectares).

Yadav said 514 hectares of land was encroached on during this period.

Responding to a query in Rajya Sabha last year, Minister of State for Environment Ashwini Choubey had said that a total of 3,67,214 hectares of reserved forest land had been encroached on across the country.

Madhya Pradesh has the highest illegal occupancy of forests, around 54,000 hectares, in India, followed by Arunachal Pradesh with 53,450 hectares of encroached land.

Yadav on Monday said the government approved diversion of 17,381 hectares of forest land in 2022-23, 16,785 hectares in 2021-22, 18,314 hectares in 2020-21, 17,392 hectares 2019-20, 19,359 hectares in 2018-19 and 19,592 hectares in 2017-18.

The data showed 7,467 hectares of forest land was diverted in 2016-17, 15,241 hectares in 2015-16, 13,045 hectares in 2014-15, 20,045 hectares in 2013-14, 13,978 hectares in 2012-13, 14,841 hectares in 2011-12, 23,117 hectares in 2010-11, 76,743 hectares in 2009-10 -- the maximum in the last 15 years -- and 12,701 hectares in 2008-09.

India's total forest cover stands at 7,13,789 square kilometres, which is 21.71 pc of the country's total geographic area.

The Forest (Conservation) Act (FCA) 1980, a crucial law to conserve forests and biodiversity in India, requires obtaining prior approval from the central government for any project or activity that involves clearing forest land. The Act helps in striking a balance between development and environmental protection by ensuring sustainable use of forest resources.

Last week, the government amended the FCA, limiting its applicability to lands recorded as forest in government records and exempting certain categories of land from its purview.

Conservationists argue that limiting the applicability of the FCA to land recorded as forest in government records invalidates the Supreme Court's 1996 judgment in the TN Godavarman case, which said the Act was applicable to land covered under the "dictionary meaning of forests" or "deemed forests" (forests not officially recorded as forests).

The environment ministry says the application of the Act on land covered under the dictionary meaning of forests (or deemed forests) had resulted in a "declining tendency in plantations in non-forest lands owing to the apprehension among individuals, organisations and authorities regarding such plantations being considered forests".

This misapprehension became a hindrance in enhancing the green cover to fulfil the Nationally Determined Contribution targets of creating an additional carbon sink of 2.5 to 3 billion tonnes of CO2 equivalent, it says.

The amended law also exempts forest land up to 10 hectares for constructing security-related infrastructure and within 100 km of international borders, Line of Control (LoC) and Line of Actual Control (LAC) for "strategic and security-related projects of national importance".

Besides, forest land up to 5 hectares in Left Wing Extremism-affected areas has been exempted from the purview of the FCA for the construction of public utility projects such as schools, water facilities and telecommunication services to address the challenges faced by the residents of these forested regions.

States, including Himachal Pradesh, Nagaland, Sikkim, Tripura, Mizoram and Assam, told a 31-member Joint Parliamentary Committee that reviewed the Forest (Conservation) Amendment Bill that such a step could potentially encompass large areas of their forest land and also affect tribals and other traditional forest dwelling communities.

Environmentalists say areas in the hilly region close to the international borders and LAC/LoC are known for their geological instability and are prone to natural disasters such as heavy rainfall, landslides, flash floods and cloudbursts.

"Unregulated and largescale diversion of forests for non-forest activities" will exacerbate the risks to communities and ecosystems, they argue.

They also say exemption of forest lands up to 0.10 hectares alongside roads and rail lines for public amenities from the requirement of forest clearances could lead to unchecked deforestation and ecological degradation in sensitive areas.

Experts also raise questions about the amended law's impact on the rights of indigenous communities and forest-dependent tribes.

The amendments could contradict the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, and the Panchayats (Extension to The Scheduled Areas) Act, 1996, which were enacted to protect the rights of these marginalised communities, they said. https://www.newsclick.in/over-3-lakh-hectares-forest-land-diverted-under-forest-conservation-act-15-years-govt

8. Does Bill amending Forest Conservation Act boost India's green legacy or put it at risk? (downtoearth.org.in) 07 Aug 2023

A contentious Bill proposing amendments to Forest (Conservation) Act, 1980 received the go ahead on August 2, 2023. The amendments raised concerns about potential forest exploitation by private, profit-driven companies or firms and neglection of state governments' concerns by consolidating more power in the hands of the central government.

The Forest (Conservation) Amendment Bill, 2023 was tabled in the current monsoon session of Parliament. The Joint Parliamentary Committee (JPC) on the Bill passed all the proposed amendments and the both lower House and the upper House of the Parliament also gave their nods to it recently.

It will now be known as the Forest (Conservation and Augmentation) Act 1980.

Environmental experts, policy makers, local people and tribal communities had, however, protested against the amendments. The Bill was enacted by the Parliament during the severe political chaos due to communal violence in Manipur and in Haryana. As a result, it was not discussed much in the Lok Sabha and the Rajya Sabha.

The major amendments in the bill encompass permission for infrastructural development within the 100 km national boundary of the country, construction alongside roads and railway track, along with eco-tourism projects like safaris and zoos within forest areas.

The Union Ministry of Environment, Forest and Climate Change (MoEFCC) had supported the Bill and made promises to gain the faith of the local stakeholders.

The amendments will enhance forest cover by plantations, combat climate change, ease the creation of national security infrastructure and improve the livelihood of the local people and tribal communities living in close proximity to forest ecosystems, the MoEFCC claimed.

The state of forest cover, biodiversity richness and the health of the forest ecosystem are dwindling due to the increasing human pressure in the form of infrastructure growth and development in the premises of forest regimes, according to several studies, peer reviewed scientific articles and reports by national and international organisations

In the light of these prevailing problems to the forest ecosystems, the amendments may escalate the pace of forest degradation, local ecology, the livelihood of the local people and ethnic tribals across the country by imposing different rules and regulations.

Some of these challenges are:

Redefining Forests

The Bill created a contradiction to the pre-existing definition of forest defined by the Supreme Court of India in a 1996 order, stating any patches of trees recorded as forest in any government records, irrespective of ownership, recognition and classification, would automatically become a deemed forest.

Approximately one-fifth to one-fourth of India's forests have lost their legal safeguard due to the modification of the definition under this amendment in the existing Act, according to the Punjab-based Public Action Committee (PAC).

Even though these regions are indeed forest, they were not officially designated as such in revenue records. In 1996, the Supreme Court granted them protection under the Forest (Conservation) Act, considering them "deemed forests".

However, this protection has now been revoked, leaving extensive forest areas in India vulnerable to exploitation for commercial purposes.

Encroachment through infrastructure development

The amendments also granted permission to the ministries and departments for building basic amenities for infrastructure development — roads and railway track lines — in up to 0.10-hectare area of forests.

In addition, it also allowed the construction of projects related to national security concerns within a 100-kilometre area of the international borders.

According to environmentalists, these changes in the act will affect the huge forest cover, especially in the northeastern states. A vast forest area can be cleared for infrastructural development under this, which will affect the local ecology, lives and livelihood of the several tribal people of the country.

Ecotourism development, safaris and zoos in forest premises:

Zoos, safaris and eco-parks are also permitted inside forest areas, which will create a huge pressure on the ecosystem, resulting in a decrease in forest health and disturbing animal movement and their habitats significantly.

It will also increase the unhealthy competition for the establishment of zoos, safaris, and eco-parks inside the forest premises by private stakeholders and firms.

The eco-tourism development further requires several other services and facilities, such as infrastructure development to accommodate tourists, roads, hotels and recreational facilities.

These developments would take place at the cost of deforestation, habitat destruction, and disruption of wildlife corridors, which are essential for maintaining the balance of forest ecosystems.

An influx of tourists can lead to overcrowding in popular ecotourism destinations, putting stress on the natural environment and wildlife. Increased footfall can result in littering, pollution and disturbance of animal habitats, affecting their behaviour and breeding patterns.

Mass tourism can often lead to cultural erosion through the commodification of local cultures and traditions, turning them into mere attractions for tourists. This can result in the loss of traditional knowledge, beliefs and faiths and practices among tribal communities.

Along with that, the revenue generated from ecotourism may not always be distributed equitably among the local communities. Often, profits end up in the hands of external investors or large corporations, while the indigenous people in or around these areas do not see significant improvements in their standard of living.

Examples of these can be seen in the outer buffer of Kanha Tiger Reserve in Madhya Pradesh, where most of the ecotourism related infrastructure belongs to the private companies of metro cities. The locals and tribals are unable to compete with them and struggle for their livelihood.

Forest exploitation, tribal livelihoods

The amendments also increased the possibilities of forest exploitation by giving permission to private and capital-oriented companies or firms to use forest land for ecotourism and the development of other infrastructural facilities for tourist recreation.

Therefore, it will promote corporate interests to a larger extent and plunder the sources of livelihood of the marginalised, poor and uneducated tribal communities.

Top-down authority

Power is also now consolidated in the hands of the central government, because forest comes under concurrent list in which states and Center both can take actions for conserving forest.

States like Nagaland, Sikkim, Mizoram and Tripura raised objections to the clause granting exemption to linear projects of strategic significance within a 100-kilometre range from international borders. The entire territories of these states would be exempted for such projects under the clause.

The Mizoram government asserted that any activity falling within the definition of a linear project could be labelled as a project of national importance or strategic significance since all such undertakings, in one way or another, hold national significance.

Thus, the Bill has given more authority to the Centre, thereby excluding local authorities and communities.

Way forward

More than 1,300 pleas were filed against the Bill by politicians, public officials, experts, environmentalists, ecologists and tribal activists. These should have been addressed properly by the MoEFCC and government officials.

A proper debate and discussion should have been conducted in both houses, seeking suggestions and comments of the opposition, to make the Bill more inclusive and acceptable

A detailed loss and benefit assessment study of the amendments should have been conducted by the MoEFCC to check the ground implementation realities on forest ecology, wildlife and livelihood of locals and tribals.

The ministry should have taken social-economic, cultural and environmental considerations into account and consulted with a variety of participants, such as ecologists, environmentalists, nonprofits, indigenous people and local governments, before passing the Bill.

In a nutshell, the central government should adopt more inclusiveness and local participation, which will lead to more transparency, better decision-making, and implementation of rules and regulations of the Act. https://www.downtoearth.org.in/blog/forests/does-bill-amending-forest-conservation-act-boost-india-s-green-legacy-or-put-it-at-risk--91039

9. How NHAI plans to dodge a debt trap (livemint.com) 07 Aug 2023

The winding course of the new expressway between Bengaluru and Mysuru, 119km long, has 11 overpasses, 64 underpasses, five bypasses and 42 small bridges. It took five years to build and cost ₹8,480 crore.

When it was inaugurated on 12 March, a lot of the social media chatter was about its scale and impact—it cut down travel time between the two cities to just 75 minutes, from over three hours earlier.

A couple of months later, the buzz on social media changed course—those using the highway grew increasingly critical.

From 1 June, the National Highway Authority of India (NHAI), the central authority that develops, maintains and manages the national highways, quietly revised the toll rates. A one-way journey by car on the expressway was revised to ₹165 from ₹135 earlier; the return journey to ₹250 from ₹205 earlier. That's a hike of 22%, much higher than the annual 7% toll fee hike that NHAI had implemented in expressways across the country in 2023. https://www.livemint.com/news/india/nhai-struggles-with-debt-as-toll-rates-soar-on-bengaluru-mysuru-expressway-11691428258146.html

10. Banks write off Rs 14.56 lakh crore NPAs in last nine financial years (businessinsider.in) 07 August 2023

Banks have written off bad loans worth Rs 14.56 lakh crore in the last nine financial years starting 2014-15, Parliament was informed on Monday. Out of the total Rs 14,56,226 crore, written off loans of large industries and services stood at Rs 7,40,968 crore.

Scheduled Commercial Banks (SCBs) have recovered an aggregate amount of Rs 2,04,668 crore in written-off loans, including corporate loans, since April, 2014 and up to March, 2023, Minister of State for Finance Bhagwat Karad said in a written reply to Lok Sabha.

Loans written-off during the financial year, net of recovery in written-off loans during the financial year (net write-off) in public sector banks (PSBs) was Rs 1.18 lakh crore in the financial year (FY) 2017-18, which has declined to 0.91 lakh crore in FY 2021-22 and to Rs 0.84 lakh crore (RBI provisional data) in FY 2022-23, he said in another reply.

Net write-off loans by private sector banks stood at Rs 73,803 crore (RBI provisional data) in FY 2022-23, he said.

Net write-off as percentage of opening gross loans and advances in private sector banks was 1.25 per cent and 1.57 per cent in FY 2017-18 and FY 2022-23 respectively, and it was 2 per cent and 1.12 per cent for PSBs during the same period.

Comprehensive steps have been taken by the government and RBI to recover and to bring down NPAs, enabled by which, gross NPAs of PSBs have declined to Rs 4.28 lakh crore as on March 31, 2023 from Rs 8.96 lakh crore as on March 31, 2018, he said.

Talking about various steps taken by the government, he said, the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002, has been amended to make it more effective.

The pecuniary jurisdiction of debt recovery tribunals (DRTs) was increased from Rs 10 lakh to Rs 20 lakh to enable the DRTs to focus on high-value cases, resulting in higher recovery for the banks and financial institutions, the minister said.

In addition, he said, National Asset Reconstruction Company Limited (NARCL) has been set up as an asset reconstruction company with an aim to resolve stressed assets above Rs 500 crore each.

The government has also approved extending a guarantee of up to Rs 30,600 crore to back Security Receipts issued by NARCL to lending institutions for acquiring stressed loan assets, he said.

Replying to another question, Karad said the board of State Bank of India (SBI) in its meeting held on June 9, 2023 had accorded approval for raising up to an amount of Rs 50,000 crore which constitutes basel III compliant AT-1 bonds up to an amount of Rs

20,000 crore, Tier-2 bonds up to an amount of Rs 10,000 crore and infrastructure bonds up to an amount of Rs 20,000 crore by the bank during FY2023-24.

As per SBI, the purpose of raising capital bonds (AT-1 and Tier-2) is to replace the existing capital bonds which are due for call up during FY2023-24, further strengthen the capital base of the bank and support asset growth, he said.

Banks are exempted from maintaining Cash Reserve Ratio and Statutory Liquidity Ratio on long-term bonds for lending to infrastructure sector, he said, adding, the raising of long-term infrastructure bonds helps the bank in better asset liability management.

In a separate reply, he said, Pradhan Mantri Mudra Yojana (PMMY) was launched on April 8, 2015 and has been implemented across the country.

As on June 30, 2023, he said, more than 42.20 crore loans amounting to Rs 24.34 lakh crore have been sanctioned to borrowers under the scheme. https://www.businessinsider.in/finance/banks/news/banks-write-off-rs-14-56-lakh-crore-npas-in-last-nine-financial-years/articleshow/102503609.cms

11. Govt alone can't handle multidimensional poverty (thehindubusinessline.com) August 07, 2023

NITI Aayog put out a report two weeks ago on multidimensional poverty. It has added a whole lot of things to what people need in order not to be poor. Without these, they are said to be poor on the "multidimensional metric". How much economic sense does this make? There was a time when poverty was measured in terms of the absence of just three things: food, shelter and clothing. As policy went, this list worked well.

But in multidimensional poverty the new set of needs range from education to health, drinking water to sanitation, cooking fuel, etc. It's not hard to see why some political parties even distribute pressure cookers, colour TVs and laptops. Strictly speaking there's no limit to what can be added to the list. Thus, now, technically it's possible for a person to have a reasonable annual income but not all of the 13 things needed by NITI Aayog. Its list would make a person 'poor' on the multidimensional measure if even a few things were missing. This large requirement might explain why the level of subsidies for cooking fuel, sanitation, drinking water, electricity, housing, and even bank accounts are positively correlated to lower levels of multidimensional poverty.

The problem arises from the political practice of making the provision of these things the responsibility of the government. In other words, private goods have been turned into public or quasi-public goods disregarding the definitions of such goods in economics. It is clear that in the years to come the world will have to deal with these two problems: the limits to which private goods can be deemed to be public goods and how this expanded list is to be financed. Economics defines public goods as those whose marginal cost of production is zero, meaning that one person's consumption does not reduce that of the other. Police, justice, clean air are examples of this. Health, drinking water, roads and education on the other hand are quasi-public goods. But cooking fuels and other such things aren't. They are purely private. But if all these are included in the list, as they will be because of the political attractiveness of such

inclusion, at the end of the day, there will be a huge extra burden on the Central and State budgets. Of course, these will be classified as welfare spending. Many States already include free electricity in legitimate welfare spending.

This unwarranted expansion has implications for the levels of taxation, investment and borrowing by governments. Basically, turning private into public goods increases the consumption expenditure of governments at the expense of investment expenditures, much of which is intended precisely to increase the supply of higher order or original public goods like defence, police, justice, etc. That is why the answer lies in increasing incomes so that private goods can remain private and expanding the tax base so that the output of real public goods can be expanded. https://www.thehindubusinessline.com/opinion/editorial/govt-alone-cant-handle-multidimensional-poverty/article67168566.ece

12. Climate finance is neither charity nor business (timesofindia.indiatimes.com) 08 Aug 2023

Climate change affects the entire planet, even when 70% of the global emissions come from just 30% of the world. Knowing that the contribution to this global crisis has been uneven, seeking even monetary attention seems unfair.

All the latest reports show that developing countries face a growing financial disparity when fighting climate change. They need more support but are still waiting to receive what has been promised. Additionally, the support being offered is mostly in the form of debts (61% of all climate finance disbursed in 2022), which only adds to their woes.

Developing countries have different needs for reducing emissions compared to developed nations. Each developing country requires a tailored approach to receive the financial support to contribute to the global net zero emission target. For instance, emerging economies like India, which supported 94% of its RE growth with domestic public funding in 2022, have some vulnerable sectors, like agriculture, that need immediate attention and financial assistance to transition to renewable energy. On the other hand, low-income countries, some of which are also the most vulnerable to climate impact, might need grants instead of loans to pursue global climate goals. Without proper support, developing countries get caught in a cycle of debt, making it almost impossible for them to invest in climate resilience or overall development at all.

Climate change affects more than just the environment. It will shape the world's future, including energy access, economic prospects, political control, skill development and climate resilience. Therefore, addressing climate change and climate finance requires a comprehensive approach.

We need to redefine climate finance at a fundamental level, clarifying what it means, what it covers, and how nations can benefit from it. Additionally, climate finance should be aimed at creating a climate resilient ecosystem. It should support research, development, and technology for the long run. The window of opportunity to limit global temperature rise is closing, and further delays in levelling the playing field could have irreversible consequences for the world's future.

In conclusion, climate finance should not be seen as charity or a business opportunity for wealthy countries. Instead, it should be seen as the only fair way to achieve a stable climate and energy efficiency for everyone. This will help them combat climate change's impacts and pave the way for a sustainable future for everyone on Earth. https://timesofindia.indiatimes.com/blogs/voices/climate-finance-is-neither-charity-nor-business/

13. Transition finance: Paving way to a net zero future (livemint.com) 07 Aug 2023

The transition to a low-carbon economy in India faces significant challenges in terms of private sector financing.

Today, the world is at a tipping point and business-as-usual isn't good enough. History has proven repeatedly that all business models will eventually face disruption from something new and more relevant. Sustainability revolution forces businesses to rethink and realign their approach to UN's Sustainable Development Goals (SDGs).

The UNCTAD'S World Investment Report 2023 reveals that developing countries face a \$4 trillion annual funding gap as they work to achieve SDG goals by 2030. Of this, developing countries face a gap of \$2.2 trillion annually for transitioning to clean energy. This is where transition finance--new solutions to fund the energy transition-can help towards a net zero future.

Transition finance can potentially enable a true shift towards decarbonization for the highest carbon-emitting industries, hydrocarbons, mining and minerals, coal-fired power generating, steel, cement, aviation, among others, which at present, are critical to the economy. It can also enable the private sector to generate sufficient returns. Private sector and institutional investors have the necessary resources to support a sustainable transition. The World Economic Forum suggests that transitioning to a nature-positive economy could generate over \$10 trillion and create nearly 400 million jobs by 2030. Most importantly, it can support the public sector through blended finance - public private partnerships.

It is beyond doubt that India has made good progress in its sustainability endeavours in response to climate change and other environmental hazards. The National Clean Energy Fund, Reseve Bank of India's maiden Sovereign Green Bond, adoption of reporting norms for Business Responsibility and Sustainability Report (BRSR), and SEBI's expanded scope of green financing and more recently the Securities and Exchange Board of India (Credit Rating Agencies) (Amendment) Regulations, 2023, which introduce rules for ESG R\ratings providers (ERPs), are measures furthering India's commitment to transition towards a greener world.

The transition to a low-carbon economy in India faces significant challenges in terms of private sector financing. These challenges stem from various barriers, including the absence of a clear definition for transition activities, which can result in "greenwashing" practices. Furthermore, there is a lack of disclosures regarding sustainability and environmental impact of investments. Additionally, the availability of innovative financial instruments specifically designed to support decarbonization efforts remains

limited. Addressing these challenges is crucial to mobilize private sector financing for the transition to a greener economy in India.

Capital markets plays a significant role in assisting sustainable transition. To meet India's 2030 target of 500GW of renewable energy capacity, green bonds/sustainability linked/thematic bonds can be one of the ways to finance this investment. According to a report by Fitch Ratings, this market is expanding with Green Social, Sustainability and Sustainability-linked (GSSS) bonds accounting for \$20 billion in the Indian debt market as of January 2023. Clearly this is not enough. To create sufficient depth and to support growth of a large and credible bond market, it is imperative that for institutional investors (MFs, Insurance Companies, EPFOs etc) there are directives from the government on allocating a certain percentage of investment in green bonds/instruments, while tax incentives will help augment demand from retail investors. https://www.livemint.com/opinion/first-person/transition-finance-paving-way-to-a-net-zero-future-11691406274557.html

14. AI and the environment: What are the pitfalls? (indianexpress.com) August 8, 2023

Artificial intelligence is an exciting and fast-changing technology. But it has a big CO2 footprint and is being used to boost activities that make climate change worse.

The field of artificial intelligence is booming, thanks in part, to the hype surrounding new tools like ChatGPT.

The chatbot, owned by Microsoft-backed Company OpenAI, has captured the public imagination with its ability to converse, write code, and compose poetry and essays in a surprisingly human way.

It's also spurred a race among tech giants to release similar, more sophisticated products.

Investment in artificial intelligence is growing rapidly. The global AI market is currently valued at \$142.3 billion (€129.6 billion), and is expected to grow to nearly \$2 trillion by 2030.

AI systems are already a big part of our lives, helping governments, industries and regular people be more efficient and make data-driven decisions. But there are some significant downsides to this technology.

AI has a big carbon footprint

In order to carry out the tasks they're supposed to, AI models need to process — or be "trained" on — mountains of data. To learn to recognize an image of a car, for example, an algorithm will need to churn through millions of pictures of cars. Or in the case of ChatGPT, it's fed colossal text databases from the internet to learn to handle human language.

This data crunching happens in data centers. It requires a lot of computing power and is energy-intensive.

"The entire data center infrastructure and data submission networks account for 2-4% of global CO2 emissions," says Anne Mollen, researcher at the Berlin-based NGO Algorithmwatch. "This is not only AI, but AI is a large part of that." That's on a par with aviation industry emissions.

In a 2019 paper, researchers from the University of Massachusetts, Amherst, found that training a common large AI model can emit up to 284,000 kilograms (626,000 pounds) of carbon dioxide equivalent — nearly five times the emissions of a car over its lifetime, including the manufacture.

"The first time I read this data, I was really shocked," said Benedetta Brevini, associate professor of political economy of communication at the University of Sydney, Australia, and author of the book, "Is AI good for the planet?"

"If you jump on a plane from London to New York, your carbon emissions will be 986 kilos. But to train one algorithm, we emit 284,000 kilos," she said. "Why are we not having a conversation about how to reduce this carbon footprint?"

It's important to note that the Massachusetts study's estimate was for an especially energy-intensive AI model. Smaller models can run on a laptop and use less energy. But those that use deep learning, such as algorithms that curate social media content, or ChatGPT, need a significant amount of computing power.

Beyond the "training" phase, more emissions are created when the model is applied in the real world, something that can happen billions of times a day, such as every time an online translator translates a word, or a chatbot answers a question.

Mollen from Algorithmwatch says this application phase can potentially account for up to 90% of the emissions in the life cycle of an AI.

So what can be done to tackle AI's footprint?

Brevini says environmental concerns need to be taken into account right from the start — in the algorithm design and training phases.

"We need to consider the entire production chain and all the environmental problems that are connected to this chain... most notably energy consumption and emissions, but also material toxicity and electronic waste," says Brevini.

Rather than building bigger and bigger AI models, as is the current trend, Mollen suggests companies could scale them down, use smaller data sets and ensure the AI is trained on the most efficient hardware available.

Using data centers in regions that rely on renewable energy and don't require huge amounts of water for cooling could also make a difference. Huge facilities in parts of the US or Australia, where fossil fuels make up a significant chunk of the energy mix, will produce more emissions than in Iceland, where geothermal power is a main source of energy and lower temperatures make cooling servers easier.

Mollen notes that tech giants have a fairly good record when it comes to using renewable energy to power their operations. Google says its carbon footprint is zero,

thanks to investment in offsets. It aims to be operating exclusively on carbon-free energy by 2030. Microsoft has pledged to be carbon negative by 2030, using carbon capture and storage technologies, and Meta plans to reach net-zero across its value chain by 2030.

But energy isn't the only consideration. The huge amount of water data centers need to prevent their facilities from overheating has raised concerns in some water-stressed regions, such as Santiago, Chile.

Google's data center there is "aggravating a drought in the area and local communities are actually revolting against the data center and against the construction of new data centers," says Mollen.

Emissions aside, how is AI being used?

But even if big tech companies shrink AI's energy use, there's another issue that is potentially more damaging to the environment, according to David Rolnick, assistant professor in the school of computer science at McGill University, Canada, and cofounder of the non-profit Climate Change AI.

He says there should be more focus on the way AI is being used to speed up activities that contribute to climate change.

One example he points to is the use of algorithms for advertising. These are deliberately "designed to increase consumption, which assuredly comes with a very significant climate cost," he says.

Rolnick also draws on a report by tech consultancy Accenture and the World Economic Forum, which predicts AI and advanced analytics will help the oil and gas industry make \$425 billion in additional profit by 2025.

Greenpeace has heavily criticized AI contracts between fossil fuel companies and Amazon, Microsoft and Google. In a report, the environmental organization said Shell, BP and ExxonMobil were using AI tools to expand their oil and gas operations, reduce costs, and in some cases boost production. It said such contracts were "significantly undermining the climate commitments" made by the tech giants.

Google has since said it will no longer build customized AI tools to help companies extract fossil fuels.

Playing catchup to the technology

The role of artificial intelligence is only likely to become more significant in the future. And keeping up with such rapidly advancing technology will be a challenge. That's why Rolnick says regulation is crucial to ensuring AI development is sustainable and doesn't make emissions targets harder to reach.

"It's really a question of what we're prioritizing and getting in early and shaping those choices that are being made," he says.

In the EU, lawmakers have for the past two years been working on the AI Act, expected to be a landmark piece of legislation, to govern AI and classify tools according to perceived risk. It's unclear whether environmental concerns will feature in the bill.

Meanwhile, other governments are also working out how to deal with AI — to encourage innovation in the field and reap the benefits this new technology brings, while avoiding the potential dangers and protecting citizens. https://indianexpress.com/article/explained/explained-climate/ai-environment-pitfalls-

8881080/